DECISION RECORD AND
FINDING OF NO SIGNIFICANT IMPACT
EA-NM-060-03-27

RECOMMENDATION: I recommend that Yates Petroleum Corporation's Application For Permit To Drill Or Deepen, the **Charlotte Federal #7** gas well, be approved. I recommend that provisions for the approval of the APD include the attachment of the Roswell Field Office requirements, as defined in the following exhibits; **Exhibit A** - the location map, **Exhibit B** - the Well Drilling Requirements, **Exhibit C** - the Conditions of Approval, **Exhibit D** - the Permanent Resource Road Requirements, as well as, any special mitigating measures that were developed in the environmental assessment for this well. I recommend the approval of the project, which will include; the construction of the access road, well pad, the use of steel tanks in lieu of reserve pits and/or emergency pits, the drilling and completion of the well, and the installation of subsequent production facilities outside of the floodplain. If the well is a dry hole or when the well is abandoned, I recommend that new substantial reclamation requirements be attached to the well abandonment, if the additional requirements are imperative for the complete restoration of the disturbed areas. These actions are subject to 43 CFR 3160 regulations for Onshore Oil and Gas operations on federal lease **NM-16324.**

These actions will affect public lands described as:

New Mexico Principal Meridian

Section 30; SE¼NE¼, T. 7 S., R. 26 E.

Authority for this action is the Mineral Leasing Act of February 25, 1920, as amended.

RATIONALE FOR RECOMMENDATION: The proposed actions would not result in any undue or unnecessary environmental degradation. Portions of the subject lands and adjacent lands have been used for similar purposes and all present and potential uses and users have been considered.

DECISION: The recommendation and rationale are adopted as my decision.

FINDING OF NO SIGNIFICANT IMPACT: Based on the analysis of potential environmental impacts contained in the attached environmental assessment, I have determined that impacts resulting from the proposed actions are not expected to be significant and an environmental impact statement is not required.

COMPLIANCE AND MONITORING: The construction phase of the proposed actions and subsequent operational phases will be monitored as per regulations.

/s/ Larry D. Bray 2/10/03

Larry D. Bray, Assistant Field Manager, Lands and Minerals **DATE**

ENVIRONMENTAL ASSESSMENT
EA# NM-060-03-27

WELL NAME & NO.: Charlotte Federal #7
Serial #: NM-16324
Section 30, T. 7 S., R. 26 E.,
N.M.P.M., Chaves County, New Mexico

OPERATOR: Yates Petroleum Corporation

ACTION: Application for Permit to Drill – Resubmitted by Electronic Commerce

SURFACE/MINERAL ESTATE: Federal Minerals/Surface

I. INTRODUCTION

A. Need for the Proposed Action:

Yates Petroleum Corporation proposes to drill and complete a **natural gas** well at the location described above. The proposed action is needed to develop the mineral lease.

B. Conformance with Land Use Plan:

The proposed action is addressed in the Roswell Resource Area Resource Management Plan/Final Environmental Impact Statement, January 1997.

C. Relationship to Statutes, Regulations, or other Plans:

The proposed action does not conflict with any known State or local planning, ordinance or zoning.

II. Proposed Action and Alternatives

A. Proposed Action-Background Information

Yates Petroleum Corporation resubmitted an Application for Permit to Drill on December 11, 2002, to drill the **Charlotte Federal #7 gas** well. The proposed action would include:

1.) The construction of approximately **350** feet of new access road from an existing lease road to the **southwest** corner of the proposed well pad. All other existing access roads would be maintained in as good or better condition than they were prior to commencement of operations.

2.) **Steel tanks will be used in lieu of reserve pits and emergency pits** because the well pad is in the Pecos River floodplain. Standard oilfield construction equipment consisting of; track-type tractors, motor graders, dump trucks, and water trucks would be used to construct the access road and well pad. A drilling rig would be used to drill the well. Associated production facilities would be installed during the production phase of this well. Production facilities will be located outside of the floodplain.

3.) Surfacing material (caliche/gravel) needed for the construction of the access road and well pad could be obtained by the operator from a FEDERAL pit in SE¼SW¼ of Section 7 - T. 7 S. - R. 26 E., **Chaves** County, New Mexico.

B. Alternatives:

1.) Relocate the Proposed Action

The well location is determined on the basis of subsurface geologic information and by the New Mexico Oil Conservation District II, imposed spacing regulations. No other alternative location would have significantly fewer impacts than, or have a clear advantage over, the proposed location. Therefore, the alternative of changing the location involved in this action is not analyzed further in this EZ.

2.) No Action

Under this alternative, the application would be rejected. None of the environmental impacts associated with the proposed action, or an alternate location, would occur. Additionally, none of the anticipated benefits of the proposed action would be realized and the existing situation would continue.

III. Description of the Affected Environment

A. General Setting:

The proposed access road and well pad are located on federal lands, an estimated 28 miles, NE, of Roswell, NM. Access to the site is described in the APD. Historical and present use of the subject lands have been limited to livestock grazing and energy development. The proposed action does not conflict with any of the existing uses.

B. Rights of Record:

An inspection of the Master Title Plats and other Bureau records revealed the following title information pertaining to valid existing prior rights on the subject lands:

- Oil and gas leases: NM-16324 - covers lease actions.
- No federally administered rights-of-way will be affected in the project area.
- No mining claims are recorded within Sec. 30, T. 7 S., R. 26 E., N.M.P.M.

C. Affected Resources:

The following critical resources have been evaluated and are either not present or are not affected by the proposed action or the alternatives in this EA:

Areas of Critical Environmental Concern (ACEC's)
Cultural Resources (01-R-011-A)
Farmlands, Prime/Unique
Native American Religious Concerns
Minority or Low-income Populations or Communities
Threatened or Endangered Species (Plants & Animals)
Wastes, Hazardous/Solid
Wetlands and Riparian Zones
Wild & Scenic Rivers
Wilderness

1. Air Quality:

The area of the proposed actions is considered Class II air quality area. A Class II area allows a moderate amount of degradation of air quality. Primary sources of air pollution are the wind blowing on disturbed or exposed soils causing dust dispersion and by motorized equipment diffusing exhaust omissions.

2. Soils:

These soil group is described in the Soil Survey of Chaves County, New Mexico - Northern Part (Page 35 and map #17). The proposed action would occur in areas in the floodplains of the Pecos River. GPA - Glendale-Pecos-Harkey association.

Permeability of the Glendale soil is moderately slow. Available water capacity is very high. Runoff is medium, and the hazard of water erosion is moderate. The hazard of soil blowing is high. 0 to 1 percent slopes.

Permeability of the Pecos soil is very slow. Available water capacity is high. Runoff is medium and the hazard of water erosion is moderate. The hazard of soil blowing is high.

Permeability of the Harkey soil is moderate. Available water capacity is high. Runoff is rapid and the hazard of water erosion is high. The hazard of soil blowing is high.

3. Floodplain:

The well pad and access road location is located in the 100-year floodplain of the Pecos River floodplain. The well pad and access road location is located in Zone A or "Area of the 100-year flood" of the Federal Emergency Management Agency – Flood Insurance Rate Map - floodplain map. For administrative purposes, the 100-year floodplain provides the basis for floodplain management on public lands. The identification of the 100-year floodplain is based on Flood Insurance Rate Maps prepared by the Federal Emergency Management Agency (1983).

4. Vegetation:

A. The native vegetation in the area is composed of mainly grasses, shrubs, and forbs, such as giant sacaton, tobosa, alkali sacaton, fourwing saltbush, and vine-mesquite. Deterioration of the native plant community results in a rapid invasion by other less desirable plant species. The mean annual precipitation is 11 to 12 inches. The Range Site for this area would be SD-3 Bottomland.

5. Ground Water Quality:

Fresh water for irrigation and stock use is obtained from the Quaternary Alluvium and the Artesia Group. Known depths to water range from 7' to approximately 250'. Additionally, the well location is near the fresh/saline water interface of the San Andres Formation and because of this there is a possibility of fresh water down to a depth range of 700' to 900'.

6. Wildlife:

Wildlife species utilizing this area for habitat include mule deer, pronghorn antelope, coyote, fox, rabbits, kangaroo rats, pocket gophers, prairie rattlesnakes, as well as a variety of songbirds, dove, quail, and raptors.

No known special status species (plant/animal) or critical habitat is present within the confines of the project area.

7. Range:

A. The well is located on the following grazing allotment:

-Grazing allotment #64048 operated by; Gary Lynch, HCR 31 Box 1080, Roswell, N.M. 88201

B. Non-Native and Invasive Weed Species (Noxious Weeds): are plant species that have a law in certain instances to eradicate the weed species and/or to prevent certain weed species from spreading. The construction of an access road and/or well location may unintentionally contribute to the establishment and spread of noxious weeds. The noxious weed seeds could be carried onto the project areas by construction equipment, the drilling rig, and transport vehicles. The main channel for seed dispersion on roads and well pads is by equipment and vehicles that were previously used and/or driven over noxious weed infested areas.

8. Visual Resources:

The proposed action is located in a scenic area along the Pecos River corridor/U.S. 70 corridor designated VRM Class III. The scene presents a brownish setting due to vegetation and landform colors in winter and, in warm months, with foliage, a variegated blend of gray, gray-green and brown color patterns.

9. Recreation:

The area around the proposed action site is primarily used by recreational visitors engaged in hunting and off-highway vehicle driving. Other visitors include oil and gas industrial workers and ranchers.

10. Cave/Karst:

While no surface cave/karst features were observed in the immediate vicinity of the proposed actions, the proposed actions are located in the *High Karst Potential Area.*

11. Minority or Low-income Populations or Communities:

The proposed actions would not affect the minority or low-income populations or communities.

IV. ENVIRONMENTAL IMPACTS

A. Proposed Action Impacts:

The surface disturbance involved in the construction of the access road and well pad would accumulate about 1.6 acres of federal surface.

Environmental impacts that can be anticipated include:

1.) The construction equipment that is used to construct the access road, well pad, and the drilling rig that is used to drill the well may impact the vegetation by contributing to the dissemination of invasive and noxious weed seeds. Washing and decontaminating the equipment prior to entering federal lands would minimize this impact.

2.) The construction of the access road and well pad, would contribute to the mixing of the soil horizons and the exposed soils would be susceptible to wind blowing and water erosion. Surfacing the exposed areas will minimize the impacts.

3.) The floodplain may be affected or impacted by accidental drilling fluid spills or leaks during the drilling phase and production phase. Steel tanks will be used in lieu of reserve pits and emergency pits because the well pad is in the Pecos River floodplain. Standard oilfield construction equipment consisting of; track-type tractors, motor graders, dump trucks, and water trucks would be used to construct the access road and well pad. A drilling rig would be used to drill the well. The steel tanks used in drilling a gas well are designed so that drilling fluids (mud) and produced fluids (e.g.: slatwater, oil,and/or condensate) are contained within the steel tanks and are not allowed to discharge out onto the floodplain. Production facilities will be located outside of the floodplain.

The impact from drilling fluid contamination is minimal since the use of steel tanks would prevent drilling fluids from entering out onto the floodplain. The impact from produced fluid is minimal since the production facilities will be located outside of the floodplain. If the well is a producer, produced fluids (e.g.: saltwater, oil, and/or condensate) could cause permanent damage to the floodplain in the event of a breech, overflow, or spill from steel tanks during the drilling phase. There is a remote possibility that accidental drilling fluid contamination of the floodplain could occur during the drilling phase. Steel tanks will be used in lieu of reserve pits and emergency pits. The steel tanks shall be constructed so as not to leak, break, or allow discharge of drilling fluids (muds). Under no circumstances will the steel tank be opened and allowed to drain drilling fluids (muds) on the ground. The holder shall dispose of drilling fluids (muds) and tailings at an authorized disposal site. No drilling fluids (muds) and/or tailings shall be dumped on location.

The use of steel tanks would protect the floodplain from the possibility of drilling fluid and production fluid contamination. The placement of production facilities outside of the floodplain would prevent contamination of the floodplain from spillage or leakage of produced fluids (e.g.: saltwater, oil, and/or condensate).

4.) The removal and stockpiling of topsoil for future use over the disturbed areas would temporarily impact the soils. The impact would be remedied upon reclamation, when the soil stockpile would be spread over the disturbed areas to establish a seed bed.

5.) The access road would be impacted when heavy precipitation causes water erosion damage. The integrity of the access road would also be impacted during periods of severe weather when water saturated segment(s) on the access road become impassable and vehicles are driven over the road. Consequently impending tire ruts would develop and eventually where the disintegrated segments occur, so do unauthorized drive-arounds materialize outside the travelway of the access road.

6.) Air quality would temporary be impacted with pollution from exhaust omissions, chemical odors, and dust that would be caused by the motorized equipment used to construct the access road, well pad, and by the drilling rig that will be used to drill the well.

7.) Some small wildlife species may be killed and their dens or nests destroyed during construction and operation of the well.

8.) Livestock, waterfowl, and other wildlife could enter and become trapped in the reserve pit that could eventually cause the annihilation of the animal(s).

9.) Birds and bats that nest or seek shelter inside open-vent exhaust stacks and production facilities could become entrapped and killed.

10.) Improper disposal of drilling muds and wastes could result in contamination of the soil and water resources and limit the viability of plants and wildlife populations in the area.

11.) Produced fluids (e.g.: saltwater, oil, and/or condensate) could cause permanent damage off the well pad in the event of a breech, overflow, or spill from storage tanks associated with production facilities on the well pad.

12.) Pipeline construction would temporarily affect the soil and vegetation along the pipeline route. Prudent pipeline construction would minimize soil disturbance and the areas should recover with appropriate revegetation efforts. Pipeline ruptures along the flow-line could cause soil contamination and the eradication of vegetation in the area(s) where the pipeline burst. Pipeline construction equipment could also impact the vegetation if the equipment is not cleansed of invasive and noxious weed seeds prior to entering federal lands.

13.) Visual Resources:

Facilities, such as produced water, condensate or oil storage tanks that rise above eight feet, would provide a geometrically strong vertical and horizontal visual contrast in form and line to the characteristic landscape and vegetation, which have flat, horizontal to slightly rolling form and line. The construction of an access road, well pad and other ancillary facilities, other than facilities greater in height than eight feet, would slightly modify the existing area visual resources. The proposed action is located in an area designated VRM Class III or IV.

The Class III objective is to: Partially retain existing landscape character. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate a casual observer's view. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape.

Through color manipulation, by painting well facilities to blend with the vegetative and landscape setting, which is a gray/gray-green/brownish drab vegetative/landform color, the view is expected to favorably blend with the form, line, color and texture of the existing landscape. The gray matte color ***Slate Gray*** from the standard environmental colors most closely approximates the gray/gray-green color of the vegetative setting.

14.) The impact of the proposed action and alternatives to minority or low-income populations or communities has been considered and no significant impact is anticipated.

B. Alternatives:

No Action Alternative:

The "No Action" alternative would constitute denial of the application. This alternative would result in none of the identified environmental impacts. There would, however, be an adverse economic impact to the applicant through the denial of the lessee's right to develop the mineral reserves or through increased costs of accessing those mineral reserves through other means. There have been

no significant or unmitigatable impacts identified as a result of this analysis which would warrant selection of the no action alternative.

C. Mitigation:

The Roswell Field Office; Well Drilling Requirements (Exhibit B), Conditions of Approval (Exhibit C), Permanent Resource Road Requirements (Exhibit D) and the special requirements derived from this EA, would be applied to this proposed action to minimize the surface disturbance and conserve the surrounding landscape.

D. Cumulative Impacts:

The direct effects of the proposed actions would include; disbursement of surface land use, soil displacement, uprooting of vegetation, and further fragmentation of wildlife habitat. Subsequent effects could include the possibility of soil contamination in the event of a leak or spill and groundwater contamination in the event of casing failure. The impact to wildlife is the temporary elimination of habitat that is viable for their existence. Impacts from reclamation would have long-term effects if improper rehabilitation efforts thwart vegetation growth. In the absence of a serious spill or excessive water runoff, consequential cumulative impacts are not expected from this proposed action.

While it is likely that there will be no significant cumulative effects from this individual action, continued oil and gas development, and other surface-disturbing activities in this area may potentially have negative cumulative impacts on vegetation, soil, water, livestock, wildlife and visual resources.

V. Consultation and Coordination

An onsite inspection was conducted on the access road and well pad **(10/26/00)**. In attendance was **Mrs. Pat Perez, Permit Agent for Yates Petroleum Corporation** and Richard Hill, Environmental Protection Specialist from BLM.

Coordination and consultation has occurred with the applicant's agent. The comments and suggestions expressed during the onsite consultation have been incorporated into this EA.

Reviewed by: Irene M. Gonzales 1/20/03

Irene M. Gonzales, Reality Specialist **DATE**

EXHIBIT B

WELL DRILLING REQUIREMENTS

OPERATORS NAME: **Yates Petroleum Corporation** LEASE NO.: **NM-16324**
WELL NAME & NO: **Charlotte Federal #7**
QUARTER/QUARTER & FOOTAGE: **SE¼NE¼ - 1500' FNL & 660' FEL**
LOCATION: **Section 30, T. 7 S., R. 26 E., N.M.P.M.**
COUNTY: **Chaves County, New Mexico**

I. GENERAL PROVISIONS:

1. **The operator has the right of administrative review of these requirements pursuant to 43 CFR 3165.1(a).**

2. The **operator** shall hereafter be identified as the **holder** in these requirements. The Authorized Officer is the person who approves the Well Drilling Requirements.

II. WELL PAD CONSTRUCTION REQUIREMENTS:

1. The BLM shall administer compliance and monitor construction of the access road and well pad. Notify **Richard G. Hill** at least **3** working days (72 Hours) prior to commencing construction of the access road and/or well pad. Roswell Field Office number **(505) 627-0247**.

2. Prior to commencing construction of the access road, well pad, or other associated developments, the holder shall provide the dirt contractor with **a copy of the approved APD signature page, a copy of the location map (EXHIBIT A), a copy of pages 1 & 2 from the Well Drilling Requirements (EXHIBIT B), and a copy of the Permanent Resource Road Requirements (EXHIBIT D).**

3. The holder shall stockpile the topsoil from the surface of the well pad for reclamation purposes. The topsoil on the **Charlotte Federal #7** well pad is approximately **6** inches in depth. Approximately **600** cubic yards of topsoil shall be stockpiled on the **Southeast** corner of the well pad, opposite the reserve pit. Upon reclamation of the well pad, the topsoil stockpile shall be redistributed over the disturbed areas. See Well Drilling Requirements - VI. Seeding Requirements - for reclamation of the well pad.

4. **Steel Tanks Requirements: NO RESERVE PITS, NO EMERGENCY PITS.**

1. **The holder shall use steel tanks in lieu of reserve pits and/or emergency pits for drilling the well.** Steel tanks will reduce soil disturbance and prevent the possibility of the drilling fluids (muds) from spilling onto the Pecos River floodplain and into the river, as well as, preventing leaching into the underground aquifers.

2. The steel tanks shall be constructed so as not to leak, break, or allow discharge of drilling fluids (muds). Under no circumstances shall the steel tank be opened and/or allowed to drain drilling fluids (muds) on the ground.

3. The steel tanks shall be equipped to deter entry by birds, bats, and other wildlife.

4. The holder shall dispose of drilling fluids (muds) and tailings at an authorized disposal site. No drilling fluids (muds) and/or tailings shall be dumped on location or on the Pecos River floodplain.

5. **Federal Mineral Materials Pit Requirements:**

A. Caliche, gravel, or other related materials from new or existing pits on Federal mineral estate shall not be taken without prior approval from the authorized officer. Contact Jerry Dutchover at (505) 627 -0236.

B. Payment for any Federal mineral materials that will be used to surface the access road and the well pad is required prior to removal of the mineral materials.

6. **Well Pad Surfacing Requirement:**

A. The well pad shall be surfaced with **6** inches of compacted caliche, gravel, or other approved surfacing material. The well pad shall be surfaced prior to drilling operations. **See Permanent Resource Road Requirements - EXHIBIT D - requirement #4, for road surfacing.**

7. **Cave Requirements:**

A. If, during any construction activities any sinkholes or cave openings are discovered, all construction activities shall immediately cease, and the Roswell Field Office shall be notified at (505) 627-0272.

B. The BLM Authorized Officer will, within 24 hours of notification in "A" above, conduct an on-the-ground field inspection for karst. At the field inspection the authorized field inspector will authorize or suggest mitigating measures to lessen the damage to the karst environment. A verbal order to proceed or stop the operation will be issued at that time.

III. DRILLING OPERATION REQUIREMENTS:

A. General Requirements:

1. The Roswell Field Office shall be notified at (505) 627-0272 in sufficient time for a BLM representative to witness: a. Spudding and BOP tests. b. Running and Cementing of the 8 5/8 and 5½ inch casings.

2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole.

3. The API No. Assigned to the well by the NMOCD shall be included on all reports submitted for this well.

4. Submit a Sundry Notice (Form 3160-5, one original and five copies) for each casing string, describing the casing and cementing operations. Include pertinent information such as; dates, hole size, casing (size, weight, grade and thread type), cement (type, quantity and top), water zones and problems or hazards encountered. The Sundry shall be submitted within 15 days of completion of each casing string. The reports may be combined into the same Sundry if they fall within the same 15 day time frame.

B. Casing:

1. The 8 5/8 inch surface casing should be set to 950 feet and cement behind the casing must be circulated to the surface. If the cement does not circulate to the surface or drops back after reaching the surface, this BLM office shall be notified and a temperature survey or cement bond log shall be run to verify the top of the cement. Prior to drilling out remedial cementing shall be done to bring cement to the surface.

2. The required fill of cement behind the 5½ inch production casing shall be sufficient to isolate all water, oil and gas, but at a minimum must extend to at least 500 feet above the perforated interval. The cement top will be verified by a temperature survey or cement bond log and will be reported to the BLM on the Sundry Notice for this casing string.

C. Pressure Control:

1. The blowout preventer assembly shall consist of a minimum of one annular or two ram preventers.

2. The minimum working pressure of the blowout preventer and related equipment (BOPE) shall be 2000 psi.

3. Before drilling below the 8 5/8 inch casing the BOPE shall be installed and tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.

a. Testing fluid must be water or an appropriate clear liquid (suitable for sub-freezing temperatures when needed). Use of drilling mud for testing is not allowed since it can mask small leaks.

b. Testing must be done in a safe workman like manner. Hard line connections shall be required.

4. The appropriate BLM office shall be notified in sufficient time for a BLM representative to witness the BOPE tests.

IV. <u>DOWN HOLE ABANDONMENT REQUIREMENTS</u>:

1. If the well is a dry hole and will be plugged, approval of the proposed plugging program may be obtained orally. However, oral approval must be confirmed in writing by immediately filing a Sundry Notice And Report On Wells (Form 3l60-5) **"Notice of Intention to Abandon"**, and submitting an original and five (5) copies to the Roswell Field Office. The report should show the total depth reached, the reason for plugging, and the proposed intervals, by depths, where plugs are to be placed, type of plug, type of plugging mud, etc.

2. If the well is not drilled, please notify the BLM so that an official release can be approved.

V. SURFACE RECLAMATION/RESTORATION REQUIREMENTS:

1. When the well is abandoned the **"Notice of Intention to Abandon"** (Form 3l60-5) could also be used by the holder as the initial report for the surface reclamation/restoration of the access road and well pad. Upon receipt of the "NOI" the Authorized Officer shall provide the holder with the specific requirements for the reclamation/restoration of the access road and well pad.

2. **Subsequent Report Of Abandonment:** The holder shall submit a second report on Form 3l60-5, Sundry Notice and Report On Wells, the original and five (5) copies to the Roswell Field Office, pertaining to the reclamation/restoration of the access road and well pad. The holder shall demonstrate that the surface reclamation/restoration requirements have been complied with. The holder shall specify that the reclamation work accomplished the restoration of the disturbed areas to as near the original surface condition the land was in prior to construction of the access road and well pad.

3. **Final Abandonment Notice:** The holder shall submit a third report on Form 3l60-5, Sundry Notice and Report On Wells, the original and five (5) copies to the Roswell Field Office, that will ascertain that all surface reclamation/restoration requirements have finally been completed and that the access road and well pad are ready for final inspection. The holder shall specify that the surface has been reclaimed in accordance with federal regulations and request final approval of the access road and well pad.

4. The holder shall comply with all the surface reclamation/restoration required by the Authorized Officer pertaining to the reclamation/restoration of the access road and well pad. Liability under bond shall be retained until surface reclamation/restoration of the access road and well pad has been completed to the satisfaction of the Authorized Officer.

VI. SEEDING REQUIREMENTS:

A. The stockpile of topsoil shall be spread over the well pad to cultivate a seed bed.

B. The reclaimed area(s) shall be seeded with the seed mixture that was determined by the Roswell Field Office for the Desired Plant Community on this well site.

C. The same seed mixture shall be used on the reclaimed access road; **See PERMANENT RESOURCE ROAD REQUIREMENT #12.**

D. The planting of the seed shall be done in accordance with the following seeding requirements:

1. **The access road and well pad shall be ripped a minimum of 16 inches deep**. The topsoil soil shall be plowed under with soil turning equipment and the plowed surface shall be disked before seeding. Seed shall be planted using a drill equipped planter with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture shall be evenly and uniformly planted over the disturbed area. Smaller/heavier seeds have a tendency to drop to the bottom of the drill and are planted first, the holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed shall be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre noted below are to be doubled.

2. The holder shall seed all the disturbed areas with the DPC seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed per acre, (Pounds of pure live seed per acre: pounds of seed X percent purity X percent germination = pounds pure live seed). There shall be no primary or secondary noxious weeds in the seed mixture. In accordance with State law(s) the seed should be tested for purity and viability within nine (9) months prior to sell. Commercial seed shall be either certified or registered seed. The seed mixture container shall be tagged in accordance with State law(s) and the certified seed tag shall be made available for inspection by the Authorized Officer.

3. Desired Plant Community seed mixture to be planted in pounds of pure live seed per acre:

GIANT SACATON (Sporobolus giganteus)	3.75 Lbs.
VINE MESQUITE (Panicum obtusum)	0.50 Lbs.
TOBOSA var.Viva (Hilaria Jamesii)	2.75 Lbs.
PLAINS BRISTLEGRASS (Setaria macrostachya)	2.00 Lbs.
FOURWING SALTBUSH (Atriplex canescens)	0.25 Lbs.
DESERT or SCARLET (Sphaeralcea ambiggua or GLOBEMALLOW S. coccinca)	0.25 Lbs.
ANNUAL SUNFLOWER (Helianthus annuus)	0.75 Lbs.
Pure live seed per acre =	9.00 Lbs.

E. The recommended time to seed is from June 15th through September 15th. The optimum seeding time is in mid-July. Successive seeding should be done either late in the fall (Sept. 15 - Nov. 15, before freeze up) or early as possible the following spring to take advantage of available ground moisture. However, the holder may seed immediately after completing surface abandonment requirements.

F. The seeding of the disturbed areas shall be repeated until a vegetation thicket is established on the access road and well pad. The Authorized Officer shall make the determination when the revegetation growth on the disturbed areas is satisfactory.

G. The holder shall be responsible for the establishment of vegetation on the access road and well pad. Evaluation of vegetation growth will not be made before the completion of the first growing season after seeding. The Authorized Officer reserves the right to require reseeding at a specific time if seed does not germinate after one growing season. Waiver of this requirement would be considered if diligent attempts to revegetate the disturbed areas have failed and the Authorized Officer determines that further attempts to replant the access road and well pad is futile.

H. Contact Richard G. Hill at (505) 627-0247 to witness the seeding operations, two (2) days prior to seeding the disturbed areas.

I. Invasive and Noxious Weeds Requirement:

A. The holder shall be held responsible should the establishment of noxious weeds began to grow within the area. Evaluation of growth of the noxious weeds shall be made upon discovery. The Authorized Officer reserves the right to require the holder to eradicate the noxious weed species that have invaded the area. Waiver of this requirement would be considered if diligent attempts to eradicate the noxious weed species has failed and the Authorized Officer determines that further attempts to eradicate the noxious weed species from the area is futile.

B. The holder shall insure that the equipment and/or vehicles that will be used to construct the access road and/or well location are not polluted with invasive and noxious weed seeds. Transporting of invasive and noxious weed seeds could occur if the equipment and/or vehicles were previously used in noxious weed infested areas. In order to prevent the spread of noxious weeds and the probability that the equipment and/or vehicles are carriers of noxious weed seeds from the conduct of previous projects in noxious weed infested areas, the Authorized Officer shall require that the equipment and vehicles be washed clean prior to construction of the access road and/or well location.

VII. ON LEASE - WELL REQUIREMENTS:

1. A. The holder shall post signs identifying the location permitted herein with the requirements contained in Onshore Oil and Gas Order #1 and 43 CFR 3162.6.

   B. The following data is required on the well sign that shall be posted in a conspicuous place on the well pad. The sign shall be kept up with current identification and shall be legible for as long as the well is in existence:

   Operator Name: Yates Petroleum Corporation
   Well Name & No.: Charlotte Federal #7
   Lease No.: NM-16324
   Footage: 1500' FNL & 660' FEL
   Location: Section 30, T. 7 S., R. 26 E.

   C. UPON ABANDONMENT OF THE WELL, THE SAME INFORMATION SHALL BE INSCRIBED ON THE DRY HOLE MARKER WITH A BEADED WELD.

2. The approval of the APD does not in any way imply or grant approval of any on-lease, off-lease, or off-unit action(s). It is the responsibility of the holder to obtain other approval(s) such as rights-of-way from the Roswell Field Office or other agencies, including private surface landowner(s).

3. All vehicles, including caterpillar track-type tractors, motor graders, off-highway trucks and any other type of motorized equipment that is used in the construction of the access road and well pad shall be confined to the area(s) herein approved. The drilling rig that is used to drill the well shall also be confined to the approved area(s).

4. **Containment Structure Requirement:**

A. A containment structure or earthen dike shall be constructed and maintained around all storage facilities/batteries. The containment structure or earthen dike shall surround the storage facilities/batteries.

B. The containment structure or earthen dike shall be constructed two (2) feet high around the facilities/batteries (the containment structure or earthen dike can be constructed higher than the two (2) feet high minimum).

C. The perimeter of the containment structure or earthen dike can be constructed substantial larger for greater holding capacity of the contents of the largest tank.

D. The containment structure or earthen dike shall be constructed so that in case of a spill the structure can contain the entire contents of the largest tank, plus 24 hour production, within the containment structure or earthen dike, unless more stringent protective requirements are deemed necessary by the Authorized Officer.

E. A containment structure or earthen dike shall be constructed and maintained around the perimeter of the well pad. The containment structure or earthen dike shall be constructed two (2) feet high around the well pad (the containment structure or earthen dike can be constructed higher than the two (2) feet high minimum).

5. **Well Completion Requirement:**

A. If the well is completed, all areas of the well pad not necessary for operations shall be reclaimed to resemble the original contours of the surrounding terrain. Cut-and-fill slopes shall be re-contoured and reduced to a slope of 3:1 or less.

6. **Painting Requirement:**

All above-ground structures (e.g.: meter houses, tanks, above ground pipelines, and related appurtenance, etc.) not subject to safety requirements shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be a color which simulates "Standard Environmental Colors" designated by the Rocky Mountain Five-State Interagency Committee. The color selected for this project is ***Slate Gray***, Munsell Soil Color Chart Number ***5Y 6/1*****.**

7. **Fence Requirement:**

The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair impacted improvements to at least their former state. On private surface the holder shall contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence. No permanent gates shall be allowed unless approved by the Authorized Officer.

8. **Open-vent Exhaust Stack Requirements:**

A. All open-vent exhaust stacks associated with heater-treater, separators and dehydrator units shall be modified to prevent birds and bats from entering them and to the extent practical to discourage perching and nesting.

B. New production equipment installed on federal leases after November 1, 1993, shall have the open-vent exhaust stacks constructed to prevent the entry of birds and bats and to the extent practical, to discourage perching, and nesting.

VIII. SPECIAL REQUIREMENT(S):

1) Low-profile facilities no greater than eight-feet-high shall be used. If necessary, multiple tanks shall be used. The facilities shall be located outside the floodplains.

2) **FLOODPLAIN REQUIREMENTS:**

A. If a threat of imminent flooding on the Pecos River should occur during drilling operations, the Roswell Field Office Manager shall issue a shut-in-order. Steel tanks containing drilling fluids (muds), toxic substance containers, and possibly the drilling rig shall be removed from the floodplain.

B. The drilling pad shall be elevated at least 6 inches above ground level and surfaced according to surfacing stipulations prior to drilling operations.

C. Provisions for containing salt water shall be made prior to beginning drilling operations. Metal tanks or tank trucks shall be in place to collect overflow of salt water. No salt water or condensation storage facilities shall be allowed in the floodplains.

D. Production facilities shall be located outside the floodplains.

E. All pipelines from the well to the transportation pipelines shall be buried.

F. A floodplain wellhead barrier shall be constructed to protect the christmas tree. Three steel posts shall be set in concrete. Horizontal steel cross bars shall connect the posts. Heavy gauge chain link fencing shall be welded or bolted to the post and cross bars. The V barrier shall point upstream or in the direction against the waterway current. See Floodplain 'V' Shaped Barrier Diagram.

G. Chemical toilets shall be used instead of latrines and the waste shall be removed from the well location and properly disposed of.

EXHIBIT C

CONDITIONS OF APPROVAL

OPERATOR: Yates Petroleum Corporation
LEASE NO: NM-16324
WELL NAME & NO.: Charlotte Federal #7
LOCATION: Section 30, T. 7 S., R. 26 E., N.M.P.M.
QUARTER/QUARTER & FOOTAGE: SE¼NE¼ - 1500' FNL & 660' FEL
COUNTY: Chaves County, New Mexico

I. GENERAL CONDITIONS OF APPROVAL:

1. The **operator** shall hereafter be identified as the **holder** in these requirements. The Authorized Officer is the person who approves the Conditions Of Approval.

2. The holder shall indemnify the United Sates against any liability for damage to life or property arising from occupancy or use of public lands under this authorization.

3. The holder shall have surface use approval prior to any construction work on change(s) or modification(s) to the access road and/or well pad. The holder shall submit (Form 3l60-5), Sundry Notice and Report On Wells, an original plus one (1) copy to the Roswell Field Office, stating the basis for any changes to previously approved plans. Prior to any revised construction the holder shall have an approved Sundry Notice and Report On Wells or written authorization to proceed with the change in plans ratified by the Authorized Officer.

4. **Weed Control:**

   The holder shall be responsible for weed control on disturbed areas within the area. The holder is responsible for consultation with the Authorized Officer and/or local authorities for acceptable weed control methods, which include following EPA and BLM requirements and policy.

5. **Hazardous Substance:**

   A. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act Of 1976, as amended (15 U.S.C. 2601, et. seg.) with regard to any toxic Substances that are used, generated by or stored on the project/pipeline route or on facilities authorized. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193). Additionally, any release of toxic substances (leaks, spills, ect.) in access of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation and Liability Act, Section 102b. A copy of any report

required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the Authorized Officer concurrent with the filing of the reports to the involved Federal agency or State government.

B. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et. seg. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et. seg.) on this project/pipeline (unless the release or threatened release is wholly unrelated to the operator's activity on the pipeline). This agreement applies without regard to whether a release is caused by the operator, its agent, or unrelated third parties.

6. **Undesirable Event:**

If, during any phase of the construction, operation, maintenance, or termination of the authorization, any oil or other pollutants should be discharged, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil or other pollutants, wherever found, shall be the responsibility of the holder, regardless of fault. Upon failure of the holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages to Federal lands resulting therefrom, the Authorized Officer may take such measures as deemed necessary to control and cleanup the discharge and restore the area, including, where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the Authorized Officer shall not relieve the holder of any liability or responsibility.

7. **Archeological, Paleontology, and Historical Sites:**

A. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on the holder's behalf, on public or Federal land shall be immediately reported to the Authorized Officer. The holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder shall be responsible for the cost of evaluation and any decision as to the proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

B. The holder is hereby obligated to comply with procedures established in the Native American Graves Protection and Repatriation Act (NAGPRA) to protect such cultural items as human remains, associated funerary objects, sacred objects, and objects of cultural patrimony discovered inadvertently during the course of project implementation. In the event that any of the cultural items listed above are discovered during the course of the project work, the holder shall immediately halt the disturbance and contact the BLM within 24 hours for instructions. The holder or initiator of any project shall be held responsible for protecting, evaluating, reporting, excavating, treating, and disposing of these cultural items according to the procedures established by the BLM in consultation with Indian Tribes. Any unauthorized collection or disturbance of cultural resources may result in a shutdown order by the Authorized Officer.

8. **Sanitation:**

   The holder shall be responsible for maintaining the site in a sanitary condition at all times; waste materials shall be disposed of promptly at an appropriate waste disposal site. "Waste" means all discarded matter including, but not limited to, human waste, trash, garbage, refuse, oil drums, petroleum products, ashes, and equipment.

9. **Open-top tanks:**

   Any open-top tank containing oil and/or toxic fluids shall be covered with netting or equipped to prevent birds, bats, and other wildlife from entering the open-top tank.

10. **Other:** None

EXHIBIT D

PERMANENT RESOURCE ROAD REQUIREMENTS

Operator: Yates Petroleum Corporation
BLM Serial Number: NM-16324
Well Name & NO.: Charlotte Federal #7
Location: Section 30, T. 7 S., R. 26 E.
1500' FNL & 660' FEL, Chaves County, N.M.

1. The holder agrees to comply with the following requirements:

GENERAL REQUIREMENTS:

A. The **operator** shall hereafter be identified as the **holder** in these requirements. The Authorized Officer is the person who approves the Permanent Resource Road Requirements.

B. The holder shall minimize any disturbance to structures on public domain surface. Damages caused to any structure during road construction operations shall be promptly repaired by the holder. Functional use of any structure shall be maintained at all times. The holder shall make a documented good-faith effort to contact the owner prior to disturbing any structure.

C. When necessary to pass through an existing fence line, the fence shall be braced on both sides of the passageway prior to cutting and the fence shall be promptly repaired to at least it's former state or to a higher standard than it was previously constructed.

D. A professional engineer shall design the access road if the road grade exceeds 10 percent slope.

2. INGRESS AND EGRESS:

The access road shall be constructed to access the well pad on the **Southwest** side of the well pad to comply with the planned access road route.

3. ROAD TRAVELWAY WIDTH:

The travelway of the road shall be constructed **14** feet wide. The maximum width of surface disturbance shall not exceed **30** feet of road construction. The specified travelway width is 14 feet for all road travelway surfaces unless the Authorized Officer approves a different width.

4. SURFACING:

The entire length of the access road travelway shall be surfaced prior to drilling operations, from the dedicated road to the well location.

The access road travelway shall be surfaced with caliche or gravel material. If other surfacing material is used, the new type of material shall be approved by the Authorized Officer. The travelway of the road shall be surfaced with **caliche** material. The caliche material shall be compacted to a minimum thickness of **6** inches for the entire length of the travelway surface on the access road. The width of surfacing shall not be less than 14 feet of travelway surface. Prior to using any mineral materials from an existing federal pit, authorization must first be obtained from the Authorized Officer.

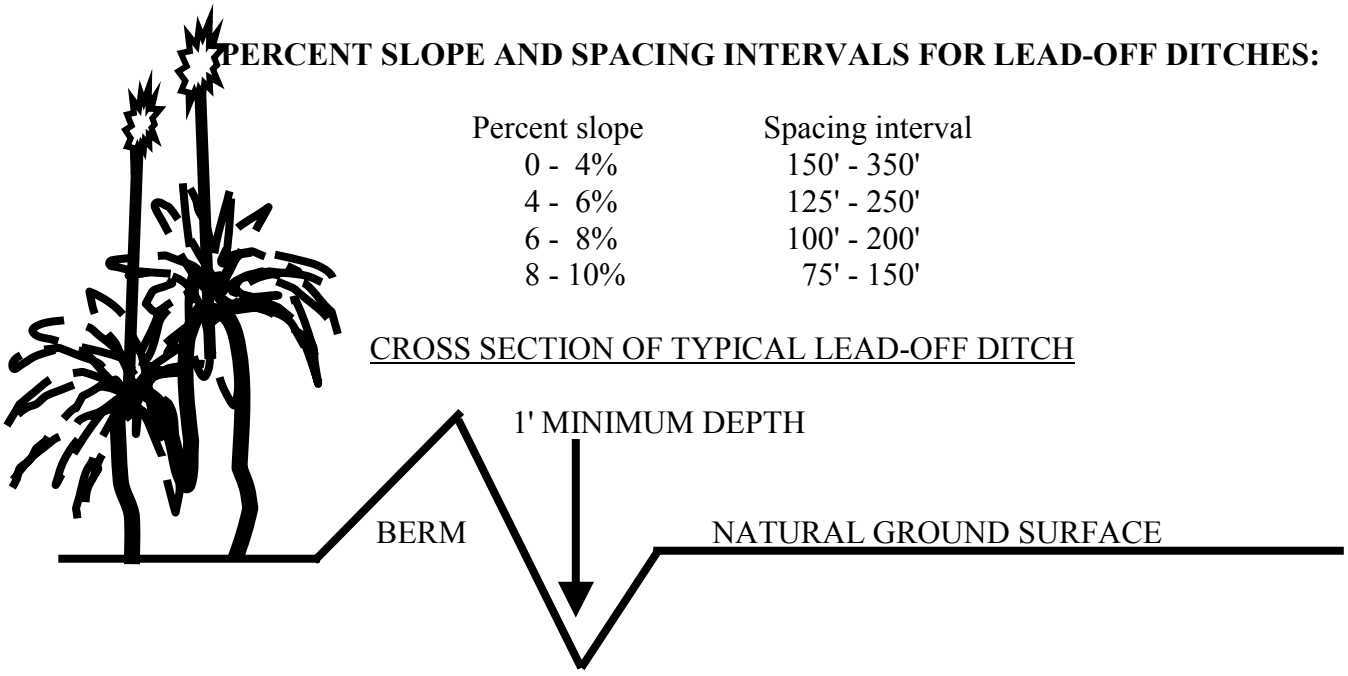
5. CROWNING AND DITCHING:

Crowning with materials on site and ditching on one side of the road, on the uphill side, shall be required. The road cross section shall conform to the cross section diagrams in Figure 1 (attached page 6). Where conditions dictate, ditching is required on both sides of the road. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road).

6. DRAINAGE:

A. Drainage control shall be ensured over the entire road through the construction of ditches, sidehill outsloping and insloping, lead-off ditches, culvert installation, and low water crossings.

B. All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval for lead-off ditches shall be determined according to the following table, but may be amended depending upon existing soil types and centerline road slope (in %):



C. A typical lead-off ditch has a minimum depth of 1 foot below and a berm of 6 inches above natural ground level. The berm shall be on the down-slope side of the lead-off ditch.

D. On road slopes exceeding 2%, water flow shall drain water into an adjacent lead-off ditch. Water flow drainage location and spacing shall be determined by the following formula:

FORMULA FOR SPACING INTERVAL OF LEAD-OFF DITCHES:

$$\text{spacing interval} = \frac{400'}{\text{road slope in \%}} + 100'$$

Ex. 4% slope: spacing interval $= \frac{400}{4} + 100 = 200$ feet

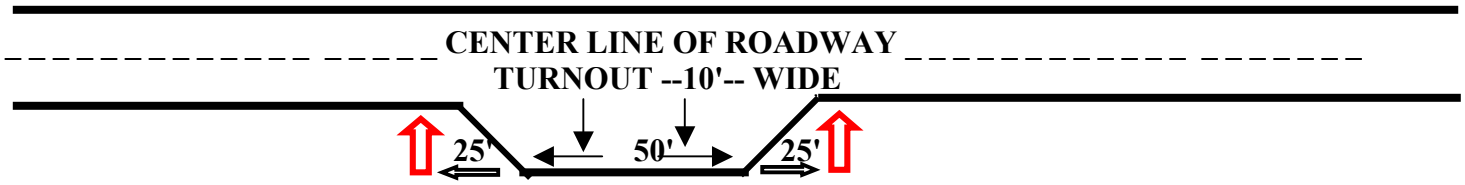
7. CULVERT INSTALLATION: NONE REQUIRED.

A. **No culvert pipes are required on this road.** Culvert pipes shall be used in drainage ravines and/or at water flow crossings that require a culvert to cross over the water drainages. The culvert shall be XXX inches in diameter (minimum 18 inch culvert). The location for the culvert installation is designated on the attached map - **EXHIBIT A**. (A culvert pipe installation diagram shall be attached to this stipulation when a culvert is required to be installed, see EXHIBIT - X).

8. TURNOUTS: No Turnouts Are Required On This Road.

Vehicle turnouts shall be constructed on all single lane roads (unless the Authorized Officer determines that the turnouts are not required). Turnouts shall be intervisible and shall be constructed on all blind curves with additional turnouts as needed to keep spacing below 1000 feet. Turnouts shall conform to the following diagram:

STANDARD TURNOUT - PLAN VIEW



9. CATTLEGUARDS: NONE REQUIRED.

Where used, all cattleguard grids and foundation designs and construction shall meet the American Association of State Highway and Transportation Officials (AASHTO) Load Rating H-20, although AASHTO U-80 rated grids shall be required where heavy loads, (exceeding H-20 loading,) are anticipated. (See BLM standard drawings for cattleguards). Cattleguard grid length shall not be less than 8 feet and width of not less than 14 feet. A wire gate (16-foot minimum width) will be provided on one side of the cattleguard unless requested otherwise by the surface user. **(A cattleguard installation diagram shall be attached to this stipulation when a cattleguard is required to be installed - see EXHIBIT X - DIAGRAM A & B).**

10. MAINTENANCE:

A. The holder shall maintain the road in a safe, usable condition. A maintenance program shall include, but not be limited to blading, ditching, culvert installation, culvert cleaning, cattleguard maintenance, and surfacing.

B. The holder shall cooperate with other authorized users in maintenance of the road(s). Failure of the holder to share maintenance costs in dollars, equipment, materials, and manpower proportionate to the holders use with other authorized users may be adequate grounds to terminate the road use. The determination as to whether maintenance expenditures have been withheld by the holder and the decision to terminate the road use shall be at the discretion of the Authorized Officer. Upon request, the Authorized Officer shall be provided with copies of any maintenance agreements entered into by the holder.

11. PUBLIC ACCESS:

A Public access on this road shall not be restricted by the holder without specific written approval being granted by the Authorized Officer. Gates or cattleguards on public lands shall not be locked or closed to public use unless closure is absolutely necessary and is authorized in writing by the Authorized Officer.

12. ROAD REHABILITATION REQUIREMENTS:

A. **The access road shall be ripped a minimum of 16 inches deep.** The surface material on the road may be removed and re-used in other approved area(s). Surfacing material left in place shall be plowed under with soil turning equipment and the plowed surface shall be disked before seeding. All culverts and other road structures shall be removed. All over-burden material shall be replaced in the cut areas, ditches, lead-off ditches, and any other excavated earthwork shall be back filled. The road shall be recontoured to as near it's original topography, as possible. An earthen berm shall be constructed at the entrance of the road to prevent vehicular traffic on the reclaimed road.

B. The reclaimed road shall be seeded with the following **DPC seed mixture** (the Roswell Field Office has determined the Desired Plant Community seed mixture for the reclaimed area(s)):

SEE EXHIBIT B - WELL DRILLING REQUIREMENTS - VI. SEEDING REQUIREMENTS - FOR THE DESIRED PLANT COMMUNITY SEED MIXTURE THAT SHALL BE USED ON THE RECLAIMED ACCESS ROAD.

C. The seed and any fertilizer involved shall be broadcast over the road bed with a spreader, than harrowed to cover the seed. Use of a seed drill planter to plant is acceptable. Appropriate measures shall be taken to ensure that the seed/fertilizer mixture is evenly and uniformly applied. There shall be no primary or secondary noxious weeds in the seed mixture. In accordance with State law(s) the seed should be tested for purity and viability within nine (9) months prior to sell. Commercial seed shall be either certified or registered and the seed mixture container shall be tagged in accordance with State law(s). The seed mixture tag shall be made available to the Authorized Officer for inspection. The seeding shall be repeated until a satisfactory vegetation thicket is established and this determination shall be made by the Authorized Officer. Evaluation of plant growth will not be made before the first growing season.

D. Seeding shall be done between June 15th through September 15th. However, the holder can seed the road immediately after preparing the road bed.

E. The Authorized Officer reserves the right to require reseeding at a specific time if seed does not germinate after one (1) growing season. Waiver of this requirement would be considered if diligent attempts to revegetate the road has repeatedly failed and the Authorized Officer determines that further attempts to revegetate the road would be futile.

F. **Contact Richard G. Hill at (505) 627-0247 to witness the seeding operations two (2) days before the start of the seeding process.**

13. SPECIAL REQUIREMENTS: NONE.